ATTACHMENT 2

STATE OF COLORADO

Bill Ritter, Jr., Governor
James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

April 29, 2008

Mr. Stephen L. Johnson
Administrator
Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

REF: February 7, 2008 Order from EPA responding to Petition VIII-2007-001 filed by Rocky Mountain Clean Air Action on December 29, 2006.

SUBJECT: Renewal Operating Permit 95OPWE035 for Anadarko (formerly Kerr-McGee) Frederick Compressor Station, Source ID 123/0184

The attached Addendum to the January 1, 2007, Technical Review Document is in response to the above-referenced EPA Order, which was issued in response to a Petition filed by Rocky Mountain Clean Air Action on December 29, 2006. In that Order, EPA stated that:

> I find that the response by the CDPHE does not adequately respond to Petitioner's comments concerning source aggregation of additional emission units owned by Kerr-McGee in the vicinity of the emission units permitted under the title V permit issued to Kerr-McGee for the Frederick Station. The comments raised by Petitioner are significant. As the petition points out, these comments raise issues as to whether there are deficiencies in the title V permit. As the permitting authority, CDPHE has a responsibility to respond to significant comments. Reliance on past practice without an explanation of the basis for that practice is not an adequate response.
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> In addition, as petitioner points out, the permit record may not contain information necessary to evaluate the PSD and Title V source definition issue. For this reason, I grant the petition on these issues and direct CDPHE to respond to petitioner's comments and, as necessary, supplement the permit record and make appropriate changes to the permit. In so doing, I am not concluding that the "source" must be defined to include any of the Kerr-McGee wells, only that the

present permit record does not provide the public with a sufficient explanation for CDPHE's approach to defining the source.

The Division is supplementing the permit record via the attached Addendum to the Technical Review Document as requested by EPA. The Addendum also provides a specific and fulsome response to Petitioner's comments, as directed by EPA's Order. As reflected in the attached response to comments, the permit conclusions reached by the Division in the final permit were correct. As such, no changes to the permit were warranted.

This letter and the attached Addendum constitute a full response by the state to EPA's Order.

Sincerely,

Paul Tourangeau, Director
Air Pollution Control Division

Cc: Mr. D.J. Law, EPA Region 8
Martha E. Rudolph, CDPHE

Addendum to the January 1, 2007 Technical Review Document
for
Renewal Operating Permit 95OPWE035
(formerly Kerr-McGee Gathering LLC) - Frederick Compressor Station
Weld County Source ID 123/0184
April 29, 2008

I. Purpose:

This Addendum is in response to the February 7, 2008 Order from EPA responding to a Petition filed by Rocky Mountain Clean Air Action on December 29, 2006. In that Order, EPA stated that:

> I find that the response by the CDPHE does not adequately respond to Petitioner's comments concerning source aggregation of additional emission units owned by Kerr-McGee in the vicinity of the emission units permitted under the title V permit issued to Kerr-McGee for the Frederick Station. The comments raised by Petitioner are significant. As the petition points out, these comments raise issues as to whether there are deficiencies in the title V permit. As the permitting authority, CDPHE has a responsibility to respond to significant comments. Reliance on past practice without an explanation of the basis for that practice is not an adequate response.
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The Division is responding to comments and supplementing the permit record via this Addendum to the Technical Review Document, as directed by EPA in its Order.

II. Initial Frederick Determination

Rocky Mountain Clean Air Action submitted written comments to the Division on the draft Renewal Operating Permit on September 14, 2006. The Division stated in the draft Operating Permit (Condition I.3.2) that "There are no other Operating Permits associated with this facility for purposes of determining applicability of Prevention of Significant Deterioration regulations"

Regarding the issue under discussion (source aggregation), the Division responded in an October 11, 2006 letter:

> The Division will address the issue of Oil and Gas facilities source aggregation upon further action relating to this interpretation, for example, by the U.S. EPA. Until that time, the Division will issue permits in a manner consistent with how it

has historically made single source determinations for oil and gas operations, which in this case would be to consider the listed facilities as separate sources for both Title V and PSD purposes. We will reevaluate this determination if warranted in the future.

Since that letter, EPA has issued a January 12, 2007 memo entitled "Source Determinations for Oil and Gas Industries". The bulk of our review of the issue in this Addendum will be based on that memo, which is wholly consistent with the basis for our determination in the subject Title V permit. See
http://www.epa.gov/region07/programs/artd/air/title5/t5memos/oilgas.pdf

III. Division Source Determination Experience

The Division has over 20 years of experience of working with EPA Region 8, EPA Headquarters, and independently regarding single source/aggregation determinations since the State received SIP approval to implement the New Source Review Program in 1986. We have also made numerous Title V single source/aggregation determinations since our interim Title V Program approval in 1995. In general, our determinations have been based on EPA guidance and EPA memos/decisions available to us.

See http://www.epa.gov/region07/programs/artd/air/nsr/nsrpg.htm and
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Since the above-referenced January 2007 EPA memo, the Division has made one determination concerning single source/aggregation in the Oil and Gas industry. This determination was set forth in a December 18, 2007 letter to Mr. Jeremy Nichols regarding his comments on a draft Construction Permit for Plains Exploration & Production (PXP) - Alkali Creek Compressor Station (AIRS ID 077/0447).

Our response to that issue is given below:

> Your comments address a *"compression facility in the Hells Gulch North area, which is located less than one mile southeast of the proposed compressor station."* As a clarification, the compression facility you are referencing is the Hell's Gulch Compressor Station (AIRS ID 077/0395), for which initial permits were originally issued to Laramie Energy, LLC in 2004. This facility has been in operation since 2004, and is actually located approximately 3.5 miles to the south-southeast of the proposed Alkali Creek compressor station.
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> In the case of the proposed Alkali Creek Compressor Station, the Hell's Gulch Compressor Station and existing and proposed wells in the vicinity that may be under the control of PXP, these facilities are considered to be individual "surface sites". A surface site is defined within 40 CFR 63.761 as "any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed." Although these surface sites may be of the same industrial grouping and under the

same common control, the Division has determined that they are not contiguous and adjacent.

The Division has historically considered oil and gas operations in most cases to be separate facilities for both Title V and PSD purposes, pending further action relating to this interpretation. On January 12, 2007, EPA issued a memorandum addressing source determination for oil and gas industries (see http://www.epa.gov/Region7/programs/artd/air/nsr/nsrmemos/oilgas.pdf), which confirms this interpretation.

This memo discusses some of the complications that arise from source determinations for oil and gas industries due to unique geographical attributes, land ownership and control issues, the contracted use of third parties, and the varying extent of operational reliance from point to point. The memo provides guidance for permitting authorities when making source determinations, but also allows that the determination "remains a case-by-case decision considering the factors relevant to the specific circumstances." The Division has relied upon the guidance in this memo in order to make a specific determination for the proposed Alkali Creek compressor station.

The January 12, 2007 memo states that:

> "Given the diverse nature of the oil and gas activities, we believe that proximity is the most informative factor in making source determinations for these industries. We do not believe that it is reasonable to aggregate well site activities, and other production field activities that occur over large geographic distances, with the downstream processing plant into a single stationary source."

Further, when evaluating the effect of "operational dependence" on oil and gas surface sites, the memo states that:

> "...for this industry, we do not believe determining whether two activities are operationally dependent drives the determination as to whether two properties are contiguous or adjacent..."

When determining whether individual surface sites are within "close proximity" of each other for source aggregation determinations, the memo provides some useful guidance:

> "A reviewing authority can consider two surface sites to be in close proximity if they are physically adjacent, or if they are separated by no more than a short distance (e.g. across a highway, separated by a city block or some similar distance)."

Because the existing Hell's Gulch compressor station is located more than three miles from the proposed Alkali Creek compressor station, the Division has determined that

these two facilities are not in close proximity and therefore should not be aggregated for source determination. Based on the guidance from EPA described above, the Division also has determined that individual wells should not be aggregated with the compressor stations in this case.

Although nearby oil and gas sources are not aggregated with the Alkali Creek compressor station for PSD and Title V purposes for the reasons stated above, nearby sources are considered during ambient air quality impact analyses – this issue is discussed further under the section concerning NO2 Ambient Air Quality Standards Impacts Analysis.

IV. Frederick Analysis: Compressor Stations

The facility is located at 3988 Weld County Road 19, Frederick, Weld County, Colorado. The source is classified as a natural gas gathering and compression facility defined under Standard Industrial Classification 1311. The facility consists of three internal combustion engines for the compression and transmission of natural gas and one triethylene glycol dehydration unit to remove water from the natural gas.

In their September 14, 2006 comment letter, Rocky Mountain Clean Air Action stated that "Additionally, according to the Division, Kerr-McGee operates and/or controls at least five other natural gas compressor stations and processing facilities located very near the Frederick Compressor Station." These five facilities were identified as the Hudson, Fort Lupton, Dougan, Brighton, and Hambert Compressor Stations. All were owed by Kerr McGee at the time. The letter requested that the six compressor stations be aggregated and considered to be a single source for Title V and New Source Review (NSR) purposes.

Note that any "bolding" of text from the EPA memo was done by the Division.

From the January 12, 2007, EPA memo ("EPA memo") (p. 2). Note that Colorado uses the same definition of stationary source and major stationary source that EPA does:

> The Federal NSR regulations define a "major stationary source" as any "stationary source" that emits or has the potential to emit above certain specified emissions thresholds (ranging from 10-250 tons per year) depending on the attainment status of the area. The Federal NSR regulations define "stationary source" to mean "any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act. The regulations establish three criteria for identifying emissions activities that belong to the same "building," "structure," "facility," or "installation": (1) whether the activities are under common control, (2) whether the activities are located on one or more contiguous or adjacent properties; and (3) whether the activities belong to the same major industrial grouping. The Title V program also considers whether activities are under common control and located on contiguous or adjacent property .

In the situation under discussion, Rocky Mountain Clean Air Action stated, and the Division agrees, that conditions (1) and (3) are met. The remaining question then becomes whether or not "the activities are located on one or more contiguous or adjacent properties".

From the EPA memo (p. 2):

> Source determinations within the oil and gas industries are not always straightforward. Even when two or more pollutant-emitting activities are clearly under common control and belong to the same 2-digit SIC code, the unique geographical attributes of the oil and gas industry necessitate a detailed evaluation of whether the activities are contiguous and adjacent.

From the EPA memo (p. 3):

> The concept of "contiguous and adjacent" considers whether the land associated with the pollutant-emitting activity is connected to, or is nearby, land associated with another pollutant emitting activity. Historically, we also have used such factors as operational dependence and proximity to inform our analysis of whether two properties are contiguous or adjacent. The concept of "operational dependence" considers the extent to which each activity relies on the other for its operations. In the oil and gas industries, materials are transferred between pollutant-emitting points and many activities are physically connected via pipelines, but the extent of the operational reliance may vary widely from point to point.
>
> Notably, in 1980, we declined to add a specific "functionality" criteria to the definition of source because we believed that "assessments of functional interrelationships would be highly subjective" and "embroil[] the Agency in fine-grained analysis." We also made clear that we do not intend "source" to encompass activities that would be many miles apart along a long-line. For instance, EPA would not treat all of the pumping stations along a pipeline as one source. Accordingly, **for this industry, we do not believe determining whether two activities are operationally dependent drives the determination as to whether two properties are contiguous or adjacent**, because it would embroil the Agency in precisely the fine-grained analysis we intended to avoid; and it would potentially lead to results which do not adhere to the common sense notion of a plant.

From the EPA memo (p. 4):

> Congress also recognized the unique geographic attributes of the oil and gas industries when it provided specific direction on how emission sources in the oil and gas exploration and production industry should be grouped together for purposes of defining a major source under the Section 112 Air Toxics Program. Specifically, Section 112(n)(4) of the Act states:

> [E]missions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources, and in the case of any oil or gas exploration or production well (with its associated equipment), such emissions shall not be aggregated for any purpose under this section.

Applying our interpretation of the Section 112(a)(1) and (n)(4) statutory language, and our understanding of hazardous air pollutant (HAP) emission sources, we defined the major source under Section 112, for purposes of these industries, in reference to individual surface sites.

For purposes of making source determinations for NSR and Title V, we recommend that permitting authorities first look to the Section 112 approach of segregating each individual surface site. While we do not believe that permitting authorities should strictly apply the Section 112 definition of major stationary source for purposes of the NSR and Title V permit programs, **we do believe that the "surface site" is a reasonable place to begin the source determination analysis**. This is because we have already determined that a surface site fits within a reasonable interpretation of the term stationary source in context of one regulatory program, and administratively, we think it reasonable for a permitting authority to at least consider whether the same boundaries are appropriate in administrating other regulatory programs.

After identifying the individual surface site, the permitting authority should consider aggregating pollutant-emitting activities at multiple surface sites, when the surface sites are under common control and located in close proximity to each other. A reviewing authority can consider two surface sites to be in close proximity if they are physically adjacent, or if they are separated by no more than a short distance (e.g. across a highway, separated by a city block or some similar distance). Once the stationary source is identified, the permitting authority should consider the emissions from all equipment located either temporarily or permanently on the surface site(s) collectively to determine whether the surface site(s) qualifies as a major stationary source for NSR and Title V.

In a great majority of cases, we expect that permitting authorities will find that a single surface site is the most-suitable industrial grouping because it correlates best with the definition of a stationary source. Accordingly, permitting authorities could treat each surface site as a separate stationary source and generally would not need to aggregate activities located on different oil and gas properties (oil and gas lease, mineral fee tract, subsurface unit area, surface fee trace or surface lease tract) or located on the same lease, when the sites are not located in close proximity to each other.

> Whether or not a permitting authority should aggregate two or more pollutant-emitting activities into a single major stationary source for purposes of NSR and Title V remains a case-by-case decision considering the factors relevant to the specific circumstances. Nonetheless, today's guidance provides permitting authorities a reasonable analytical approach that simplifies the determination process and assures greater uniformity in permitting decisions. Unless unique factors (such as proximity or interdependence) indicate otherwise, permitting authorities can consider oil and gas exploration and production activity located on a single surface site to be an individual stationary source.

From the EPA memo (p. 1):

> As explained in detail below, we suggest that permitting authorities begin the analysis by evaluating whether each individual surface site qualifies as a separate stationary source, and then aggregating two or more surface sites **only if the surface sites are under common control and are located in close proximity to each other.** The term "surface site" generally refers to a single area of development and includes any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed. See e.g. 40 CFR 63 .761.

Using Google Map, the Division determined that the closest of the five Compressor Stations under discussion (Dougan) was approximately 7.2 miles from the Frederick Station. Following are the rest of the approximate distances:

Frederick to Hudson: 13.6 miles
Frederick to Hambert: 17 miles
Frederick to Brighton: 13.8 miles
Frederick to Ft. Lupton: 9.0 miles

Among the five stations, the closest two are Ft. Lupton and Hudson, which are approximately 6.2 miles apart. See attached map.

On an historic note, EPA Region 8 issued PSD permits for the Frederick Station (1981) and the Ft. Lupton Station (1980). Based on a review of the original Technical Review Documents of the other stations (see http://www.cdphe.state.co.us/ap/titlev.html#Permit%20Tracking under Kerr-McGee), it appears that at least three of them (Hudson, Hambert, and Brighton) were in operation at that time. EPA chose not to aggregate the stations during the PSD permit process.

Based on the above record, and considering the above EPA guidance, as well as previous EPA and Division determinations, the Division's determination is that the Frederick Compressor station should not be aggregated with any or all of the other Compressor Stations under discussion (Hudson, Fort Lupton, Dougan, Brighton, and Hambert) for either Title V or New Source Review (NSR) purposes. These are separate surface sites, and are not in close proximity to the Frederick Station.

V. Frederick Analysis: Wells

In its September 14, 2006 comment letter, Rocky Mountain Clean Air Action stated that "Nearly 4,000 natural gas wells are under common control by Kerr-Mcgee and clearly all have a functional interrelationship with the Frederick Compressor Station." The letter also stated that "the Division failed to consider pollutant emitting activities from the dozens, perhaps hundreds, of natural gas wells currently owned and operated by Kerr-McGee that supply the Frederick Compressor Station with natural gas and pollutant emitting activities from interrelated and adjacent natural gas compressor stations and processing facilities controlled and/or owned by Kerr-McGee. These adjacent pollutant emitting activities are all related to the production of natural gas in the Wattenberg gas field, which is primarily located in Weld County.

The letter suggest that the 4,000 wells be aggregated with the Frederick Station (and by extension, the other five stations) into single source for Title V and New Source Review (NSR) purposes. See attached map from the September 14, 2006 comment letter from Rocky Mountain Clean Air Action.

From the EPA Memo (p. 2):

> In implementing the stationary source definition for the major NSR and Title V permit programs, the foremost principle that guides our decision-making is that we should apply a "common sense notion" of a plant. In Alabama Power v. Costle, the court cautioned that ". . . EPA cannot treat contiguous and commonly owned units as a single source unless they fit within the four permissible statutory terms," and that "EPA should . . . provide for the aggregation, where appropriate, of industrial activities according to considerations such as proximity and ownership." In 1980, we expressed the view that Alabama Power set boundaries on our discretion to interpret the component terms of "stationary source." Specifically, we indicated that we must (1) reasonably carry out the purposes of Prevention of Significant Deterioration (PSD); (2) approximate a common sense notion of a "plant"; and (3) avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning of "building," "structure," "facility" or "installation." Accordingly, we follow these overarching principles in interpreting the three regulatory criteria in context of a given source determination.

From the EPA memo (p. 3):

> **We do not believe that it is reasonable to aggregate well site activities, and other production field activities that occur over large geographic distances, with the downstream processing plant into a single major stationary source.** Aggregation of such geographically-dispersed activities defies the concept of contiguous and adjacent. While the land mass may be "contiguous or adjacent" when viewed as a whole, the limited portion of the properties physically associated with the pollutant-emitting activity are not necessarily nearby, connected, or in any way proximate to each other.

VI. Conclusion

The Division has determined that its original conclusion as stated in our October 11, 2006 letter to Rocky Mountain Clean Air Action is correct. Since no Permit revisions are necessary, Reopening under the provisions of either 40 CFR Part 70, §70.7(f) or §70.7(g) is not required.

The Rocky Mountain Clean Air Action letter makes reference to the fact that the wells are all located in the Wattenberg field. The Wattenberg field is an expansive subsurface geologic structure covering a very large geographic area. Following are some descriptions of the area:

The Colorado Geological Survey
http://geosurvey.state.co.us/Default.aspx?tabid=365

> It begins at Broomfield on the southwest and continues to the northeast of Greeley. Wattenberg is the 8th largest gas field in the United States in terms of proven gas reserves. It is the 7th ranked gas field in the nation in annual gas production. Wattenberg is also the 26th largest oil field in the United States in terms of proven reserves. (Source: U.S. Department of Energy, Energy Information Agency)

The Denver Business Journal
http://denver.bizjournals.com/denver/stories/2005/10/31/story2.html

> a cache of natural gas that is the state's second-largest gas field and the sixth-largest in the United States. Discovered in the 1970s, the Wattenberg Field is about 50 miles long and 50 miles wide. It's mostly in Weld County, but parts extend into Adams, Boulder, Broomfield and Larimer counties.

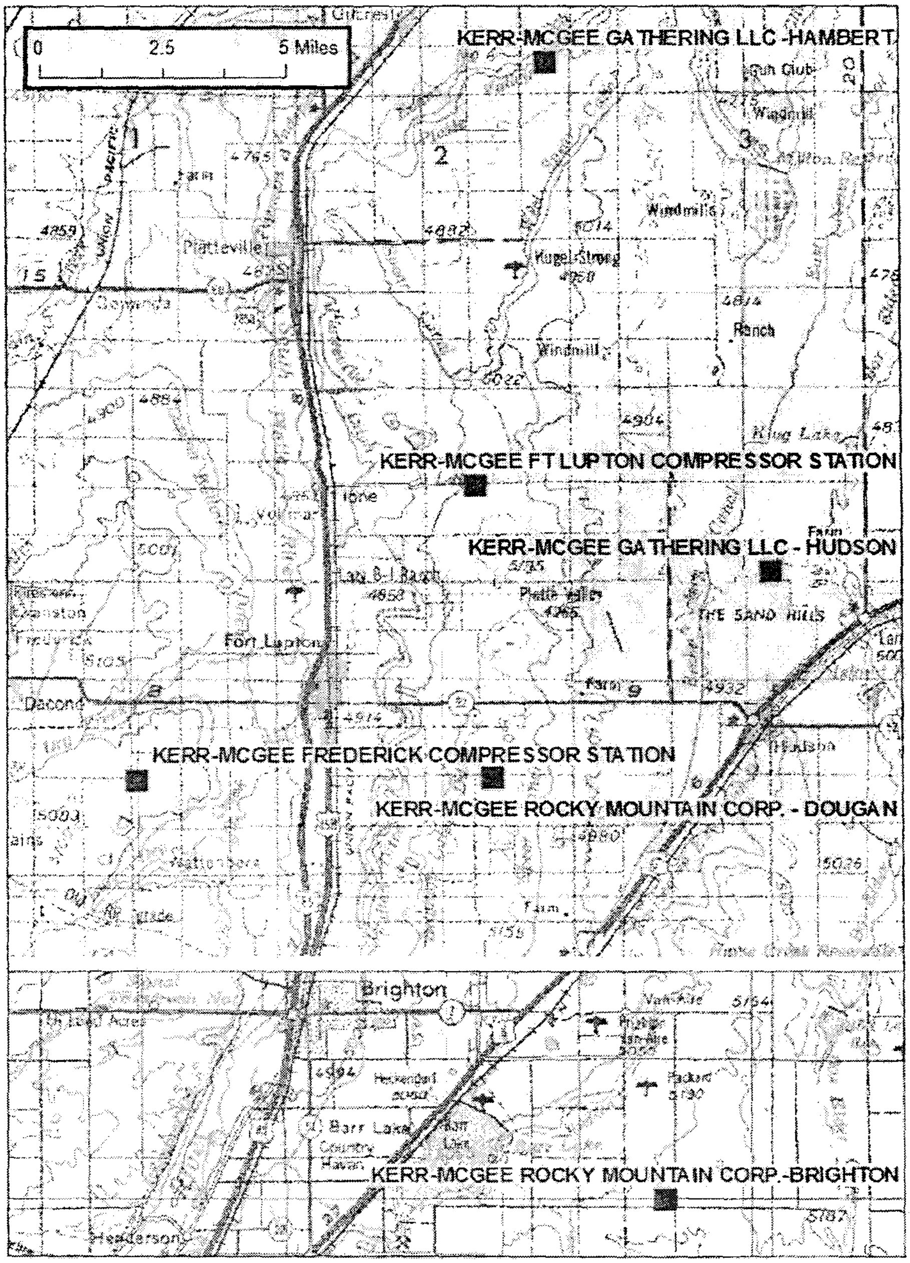
Search and Discovery
http://www.searchanddiscovery.net/documents/98003/index.htm

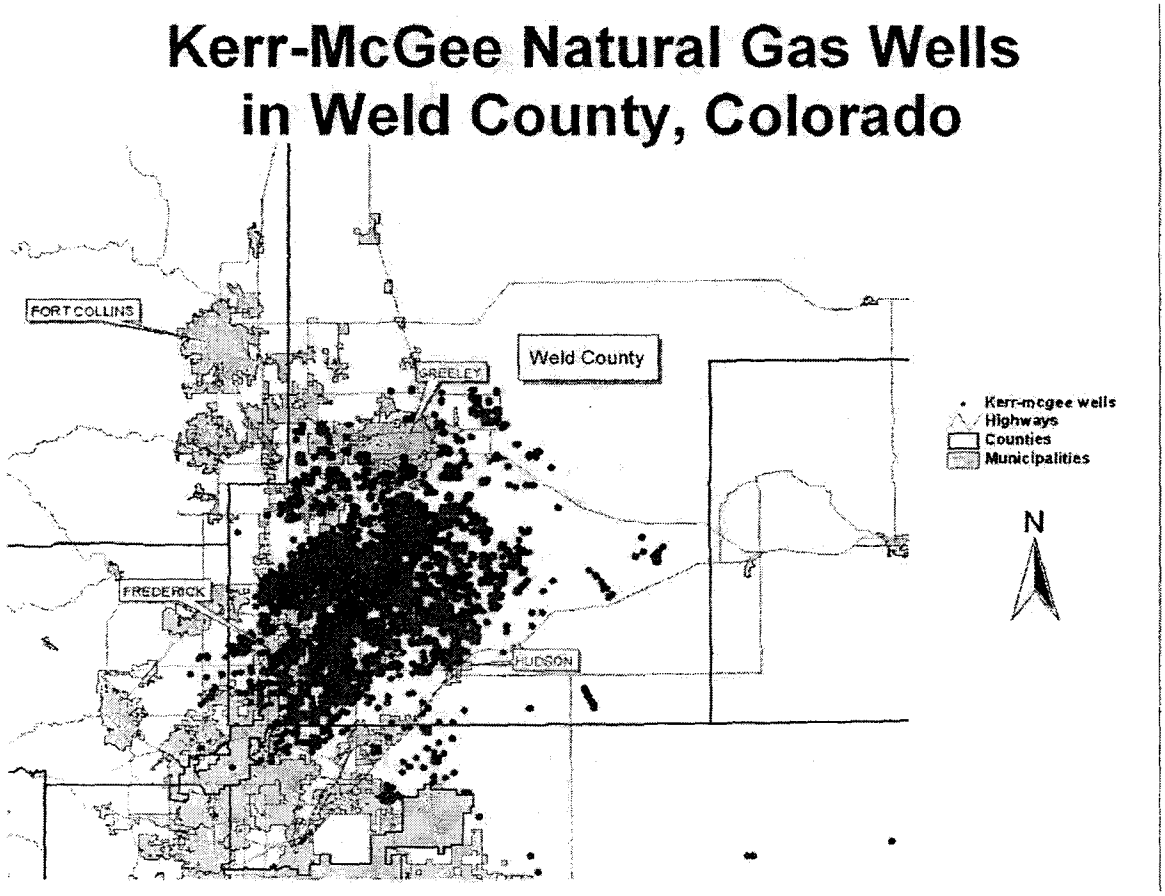
> The most important mineral resource activity in Colorado during the past decade has been the discovery and development of the Wattenberg and adjacent petroleum fields. Located north of Denver across the axis of the Denver basin, the Wattenberg is estimated to have reserves of 1.3 trillion cubic feet in the tight J (Muddy) Sandstone (delta front) reservoir over an area of 600,000 acres at depths of 7,600 to 8,400 ft

A rough estimate of the surface area covered by the wells on the map submitted by Rocky Mountain Clean Air Action would be in excess of 600 square miles. Note that the surface and subsurface rights are held by numerous unrelated individuals/companies/corporations and governments.

On an historic note, EPA Region 8 issued a PSD permit for the Frederick Station in 1981. Presumably, there were numerous wells in the area at the time. EPA chose not to aggregate the wells with the Frederick Station during the PSD permit process.

Based on the above record and considering the above EPA guidance, as well as previous EPA and Division determinations, the Division's determination is that the Frederick Compressor station should not be aggregated with any or all of the production wells referred to by Rocky Mountain Clean Air Action for either Title V or New Source Review (NSR) purposes.


0 2.5 5 Miles
KERR-MCGEE GATHERING LLC -HAMBERT
KERR-MCGEE FT LUPTON COMPRESSOR STATION
KERR-MCGEE GATHERING LLC - HUDSON
KERR-MCGEE FREDERICK COMPRESSOR STATION
KERR-MCGEE ROCKY MOUNTAIN CORP. - DOUGAN
KERR-MCGEE ROCKY MOUNTAIN CORP.-BRIGHTON
Platteville
Fort Lupton
Brighton
Hudson
Henderson
Barr Lake
THE SAND HILLS



Data from the Colorado Oil and Gas Conservation Commission, Map Prepared by Rocky Mountain Clean Air Action.

The Colorado Department of Public Health and Environment, Air Pollution Control Division, makes no claim as to its accuracy.

Addendum to the January 1, 2007 Technical Review Document
for
Renewal Operating Permit 95OPWE035
(formerly Kerr-McGee Gathering LLC) - Frederick Compressor Station
Weld County Source ID 123/0184
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I. Purpose:

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> has historically made single source determinations for oil and gas operations, which in this case would be to consider the listed facilities as separate sources for both Title V and PSD purposes. We will reevaluate this determination if warranted in the future.

Since that letter, EPA has issued a January 12, 2007 memo entitled "Source Determinations for Oil and Gas Industries". The bulk of our review of the issue in this Addendum will be based on that memo, which is wholly consistent with the basis for our determination in the subject Title V permit. See
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> In the case of the proposed Alkali Creek Compressor Station, the Hell's Gulch Compressor Station and existing and proposed wells in the vicinity that may be under the control of PXP, these facilities are considered to be individual "surface sites". A surface site is defined within 40 CFR 63.761 as "any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed." Although these surface sites may be of the same industrial grouping and under the

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> "Given the diverse nature of the oil and gas activities, we believe that proximity is the most informative factor in making source determinations for these industries. We do not believe that it is reasonable to aggregate well site activities, and other production field activities that occur over large geographic distances, with the downstream processing plant into a single stationary source."

Further, when evaluating the effect of "operational dependence" on oil and gas surface sites, the memo states that:

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> "A reviewing authority can consider two surface sites to be in close proximity if they are physically adjacent, or if they are separated by no more than a short distance (e.g. across a highway, separated by a city block or some similar distance)."

Because the existing Hell's Gulch compressor station is located more than three miles from the proposed Alkali Creek compressor station, the Division has determined that

these two facilities are not in close proximity and therefore should not be aggregated for source determination. Based on the guidance from EPA described above, the Division also has determined that individual wells should not be aggregated with the compressor stations in this case.

Although nearby oil and gas sources are not aggregated with the Alkali Creek compressor station for PSD and Title V purposes for the reasons stated above, nearby sources are considered during ambient air quality impact analyses – this issue is discussed further under the section concerning NO2 Ambient Air Quality Standards Impacts Analysis.

IV. Frederick Analysis: Compressor Stations

The facility is located at 3988 Weld County Road 19, Frederick, Weld County, Colorado. The source is classified as a natural gas gathering and compression facility defined under Standard Industrial Classification 1311. The facility consists of three internal combustion engines for the compression and transmission of natural gas and one triethylene glycol dehydration unit to remove water from the natural gas.

In their September 14, 2006 comment letter, Rocky Mountain Clean Air Action stated that "Additionally, according to the Division, Kerr-McGee operates and/or controls at least five other natural gas compressor stations and processing facilities located very near the Frederick Compressor Station." These five facilities were identified as the Hudson, Fort Lupton, Dougan, Brighton, and Hambert Compressor Stations. All were owed by Kerr McGee at the time. The letter requested that the six compressor stations be aggregated and considered to be a single source for Title V and New Source Review (NSR) purposes.

Note that any "bolding" of text from the EPA memo was done by the Division.

From the January 12, 2007, EPA memo ("EPA memo") (p. 2). Note that Colorado uses the same definition of stationary source and major stationary source that EPA does:

> The Federal NSR regulations define a "major stationary source" as any "stationary source" that emits or has the potential to emit above certain specified emissions thresholds (ranging from 10-250 tons per year) depending on the attainment status of the area. The Federal NSR regulations define "stationary source" to mean "any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act. The regulations establish three criteria for identifying emissions activities that belong to the same "building," "structure," "facility," or "installation": (1) whether the activities are under common control, (2) whether the activities are located on one or more contiguous or adjacent properties; and (3) whether the activities belong to the same major industrial grouping. The Title V program also considers whether activities are under common control and located on contiguous or adjacent property .

In the situation under discussion, Rocky Mountain Clean Air Action stated, and the Division agrees, that conditions (1) and (3) are met. The remaining question then becomes whether or not "the activities are located on one or more contiguous or adjacent properties".

From the EPA memo (p. 2):

> Source determinations within the oil and gas industries are not always straightforward. Even when two or more pollutant-emitting activities are clearly under common control and belong to the same 2-digit SIC code, the unique geographical attributes of the oil and gas industry necessitate a detailed evaluation of whether the activities are contiguous and adjacent.

From the EPA memo (p. 3):

> The concept of "contiguous and adjacent" considers whether the land associated with the pollutant-emitting activity is connected to, or is nearby, land associated with another pollutant emitting activity. Historically, we also have used such factors as operational dependence and proximity to inform our analysis of whether two properties are contiguous or adjacent. The concept of "operational dependence" considers the extent to which each activity relies on the other for its operations. In the oil and gas industries, materials are transferred between pollutant-emitting points and many activities are physically connected via pipelines, but the extent of the operational reliance may vary widely from point to point.
>
> Notably, in 1980, we declined to add a specific "functionality" criteria to the definition of source because we believed that "assessments of functional interrelationships would be highly subjective" and "embroil[] the Agency in fine-grained analysis." We also made clear that we do not intend "source" to encompass activities that would be many miles apart along a long-line. For instance, EPA would not treat all of the pumping stations along a pipeline as one source. Accordingly, **for this industry, we do not believe determining whether two activities are operationally dependent drives the determination as to whether two properties are contiguous or adjacent**, because it would embroil the Agency in precisely the fine-grained analysis we intended to avoid, and it would potentially lead to results which do not adhere to the common sense notion of a plant.

From the EPA memo (p. 4):

> Congress also recognized the unique geographic attributes of the oil and gas industries when it provided specific direction on how emission sources in the oil and gas exploration and production industry should be grouped together for purposes of defining a major source under the Section 112 Air Toxics Program. Specifically, Section 112(n)(4) of the Act states:

> [E]missions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources, and in the case of any oil or gas exploration or production well (with its associated equipment), such emissions shall not be aggregated for any purpose under this section.

Applying our interpretation of the Section 112(a)(1) and (n)(4) statutory language, and our understanding of hazardous air pollutant (HAP) emission sources, we defined the major source under Section 112, for purposes of these industries, in reference to individual surface sites.

For purposes of making source determinations for NSR and Title V, we recommend that permitting authorities first look to the Section 112 approach of segregating each individual surface site. While we do not believe that permitting authorities should strictly apply the Section 112 definition of major stationary source for purposes of the NSR and Title V permit programs, **we do believe that the "surface site" is a reasonable place to begin the source determination analysis**. This is because we have already determined that a surface site fits within a reasonable interpretation of the term stationary source in context of one regulatory program, and administratively, we think it reasonable for a permitting authority to at least consider whether the same boundaries are appropriate in administrating other regulatory programs.

After identifying the individual surface site, the permitting authority should consider aggregating pollutant-emitting activities at multiple surface sites, when the surface sites are under common control and located in close proximity to each other. A reviewing authority can consider two surface sites to be in close proximity if they are physically adjacent, or if they are separated by no more than a short distance (e.g. across a highway, separated by a city block or some similar distance). Once the stationary source is identified, the permitting authority should consider the emissions from all equipment located either temporarily or permanently on the surface site(s) collectively to determine whether the surface site(s) qualifies as a major stationary source for NSR and Title V.

In a great majority of cases, we expect that permitting authorities will find that a single surface site is the most-suitable industrial grouping because it correlates best with the definition of a stationary source. Accordingly, permitting authorities could treat each surface site as a separate stationary source and generally would not need to aggregate activities located on different oil and gas properties (oil and gas lease, mineral fee tract, subsurface unit area, surface fee trace or surface lease tract) or located on the same lease, when the sites are not located in close proximity to each other.

> Whether or not a permitting authority should aggregate two or more pollutant-emitting activities into a single major stationary source for purposes of NSR and Title V remains a case-by-case decision considering the factors relevant to the specific circumstances. Nonetheless, today's guidance provides permitting authorities a reasonable analytical approach that simplifies the determination process and assures greater uniformity in permitting decisions. Unless unique factors (such as proximity or interdependence) indicate otherwise, permitting authorities can consider oil and gas exploration and production activity located on a single surface site to be an individual stationary source.

From the EPA memo (p. 1):

> As explained in detail below, we suggest that permitting authorities begin the analysis by evaluating whether each individual surface site qualifies as a separate stationary source, and then aggregating two or more surface sites **only if the surface sites are under common control and are located in close proximity to each other.** The term "surface site" generally refers to a single area of development and includes any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed. See e.g. 40 CFR 63 .761.

Using Google Map, the Division determined that the closest of the five Compressor Stations under discussion (Dougan) was approximately 7.2 miles from the Frederick Station. Following are the rest of the approximate distances:

Frederick to Hudson: 13.6 miles
Frederick to Hambert: 17 miles
Frederick to Brighton: 13.8 miles
Frederick to Ft. Lupton: 9.0 miles

Among the five stations, the closest two are Ft. Lupton and Hudson, which are approximately 6.2 miles apart. See attached map.

On an historic note, EPA Region 8 issued PSD permits for the Frederick Station (1981) and the Ft. Lupton Station (1980). Based on a review of the original Technical Review Documents of the other stations (see http://www.cdphe.state.co.us/ap/titlev.html#Permit%20Tracking under Kerr-McGee), it appears that at least three of them (Hudson, Hambert, and Brighton) were in operation at that time. EPA chose not to aggregate the stations during the PSD permit process.

Based on the above record, and considering the above EPA guidance, as well as previous EPA and Division determinations, the Division's determination is that the Frederick Compressor station should not be aggregated with any or all of the other Compressor Stations under discussion (Hudson, Fort Lupton, Dougan, Brighton, and Hambert) for either Title V or New Source Review (NSR) purposes. These are separate surface sites, and are not in close proximity to the Frederick Station.

V. Frederick Analysis: Wells

In its September 14, 2006 comment letter, Rocky Mountain Clean Air Action stated that "Nearly 4,000 natural gas wells are under common control by Kerr-Mcgee and clearly all have a functional interrelationship with the Frederick Compressor Station." The letter also stated that "the Division failed to consider pollutant emitting activities from the dozens, perhaps hundreds, of natural gas wells currently owned and operated by Kerr-McGee that supply the Frederick Compressor Station with natural gas and pollutant emitting activities from interrelated and adjacent natural gas compressor stations and processing facilities controlled and/or owned by Kerr-McGee. These adjacent pollutant emitting activities are all related to the production of natural gas in the Wattenberg gas field, which is primarily located in Weld County.

The letter suggest that the 4,000 wells be aggregated with the Frederick Station (and by extension, the other five stations) into single source for Title V and New Source Review (NSR) purposes. See attached map from the September 14, 2006 comment letter from Rocky Mountain Clean Air Action.

From the EPA Memo (p. 2):

> In implementing the stationary source definition for the major NSR and Title V permit programs, the foremost principle that guides our decision-making is that we should apply a "common sense notion" of a plant. In Alabama Power v. Costle, the court cautioned that ". . . EPA cannot treat contiguous and commonly owned units as a single source unless they fit within the four permissible statutory terms," and that "EPA should . . . provide for the aggregation, where appropriate, of industrial activities according to considerations such as proximity and ownership." In 1980, we expressed the view that Alabama Power set boundaries on our discretion to interpret the component terms of "stationary source." Specifically, we indicated that we must (1) reasonably carry out the purposes of Prevention of Significant Deterioration (PSD); (2) approximate a common sense notion of a "plant"; and (3) avoid aggregating pollutant-emitting activities that as a group would not fit within the ordinary meaning of "building," "structure," "facility" or "installation." Accordingly, we follow these overarching principles in interpreting the three regulatory criteria in context of a given source determination.

From the EPA memo (p. 3):

> **We do not believe that it is reasonable to aggregate well site activities, and other production field activities that occur over large geographic distances, with the downstream processing plant into a single major stationary source**. Aggregation of such geographically-dispersed activities defies the concept of contiguous and adjacent. While the land mass may be "contiguous or adjacent" when viewed as a whole, the limited portion of the properties physically associated with the pollutant-emitting activity are not necessarily nearby, connected, or in any way proximate to each other.

The Rocky Mountain Clean Air Action letter makes reference to the fact that the wells are all located in the Wattenberg field. The Wattenberg field is an expansive subsurface geologic structure covering a very large geographic area. Following are some descriptions of the area:

The Colorado Geological Survey
http://geosurvey.state.co.us/Default.aspx?tabid=365

> It begins at Broomfield on the southwest and continues to the northeast of Greeley. Wattenberg is the 8th largest gas field in the United States in terms of proven gas reserves. It is the 7th ranked gas field in the nation in annual gas production. Wattenberg is also the 26th largest oil field in the United States in terms of proven reserves. (Source: U.S. Department of Energy, Energy Information Agency)

The Denver Business Journal
http://denver.bizjournals.com/denver/stories/2005/10/31/story2.html

> a cache of natural gas that is the state's second-largest gas field and the sixth-largest in the United States. Discovered in the 1970s, the Wattenberg Field is about 50 miles long and 50 miles wide. It's mostly in Weld County, but parts extend into Adams, Boulder, Broomfield and Larimer counties.

Search and Discovery
http://www.searchanddiscovery.net/documents/98003/index.htm

> The most important mineral resource activity in Colorado during the past decade has been the discovery and development of the Wattenberg and adjacent petroleum fields. Located north of Denver across the axis of the Denver basin, the Wattenberg is estimated to have reserves of 1.3 trillion cubic feet in the tight J (Muddy) Sandstone (delta front) reservoir over an area of 600,000 acres at depths of 7,600 to 8,400 ft

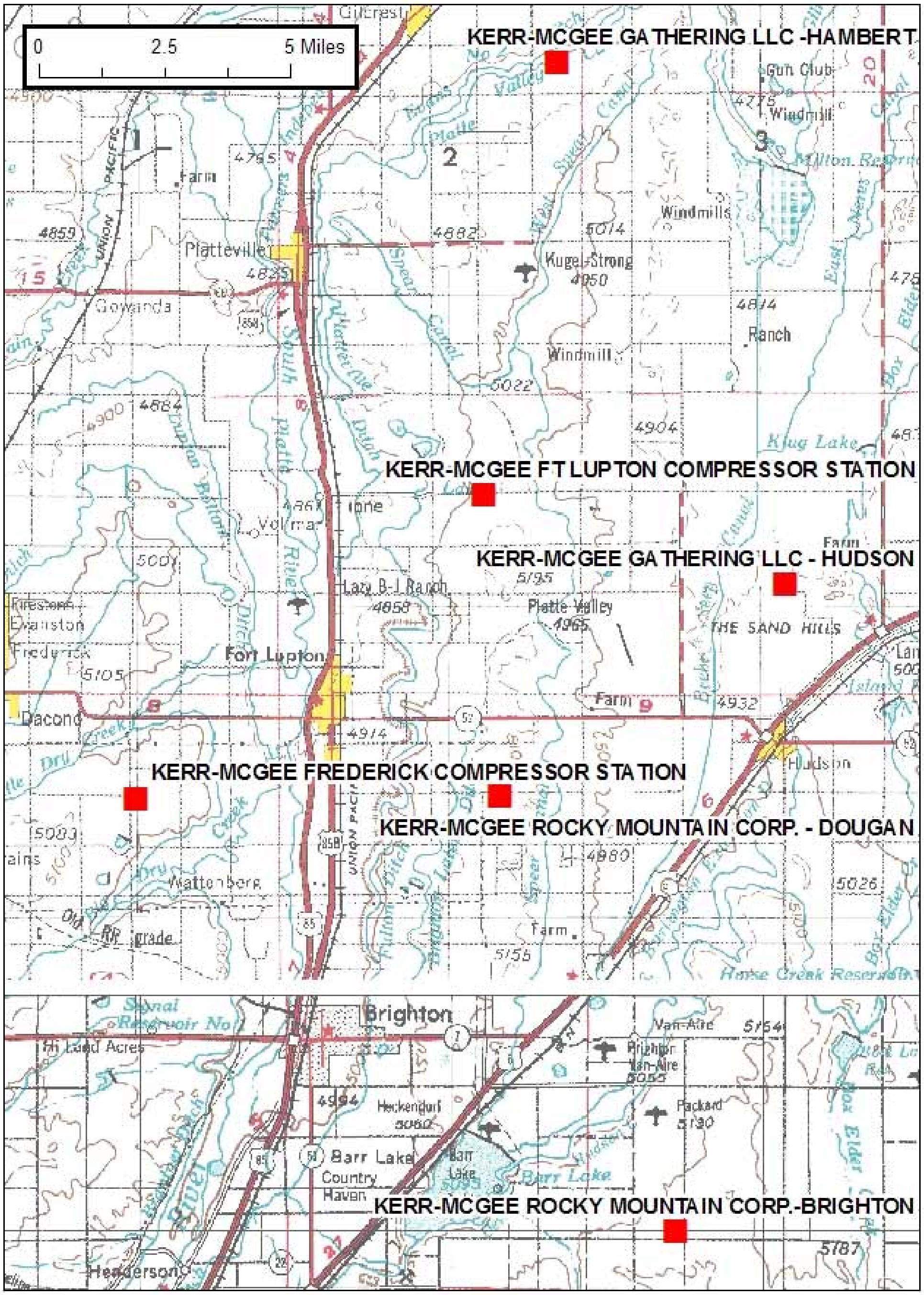
A rough estimate of the surface area covered by the wells on the map submitted by Rocky Mountain Clean Air Action would be in excess of 600 square miles. Note that the surface and subsurface rights are held by numerous unrelated individuals/companies/corporations and governments.

On an historic note, EPA Region 8 issued a PSD permit for the Frederick Station in 1981. Presumably, there were numerous wells in the area at the time. EPA chose not to aggregate the wells with the Frederick Station during the PSD permit process.

Based on the above record and considering the above EPA guidance, as well as previous EPA and Division determinations, the Division's determination is that the Frederick Compressor station should not be aggregated with any or all of the production wells referred to by Rocky Mountain Clean Air Action for either Title V or New Source Review (NSR) purposes.

VI. Conclusion

The Division has determined that its original conclusion as stated in our October 11, 2006 letter to Rocky Mountain Clean Air Action is correct. Since no Permit revisions are necessary, Reopening under the provisions of either 40 CFR Part 70, §70.7(f) or §70.7(g) is not required.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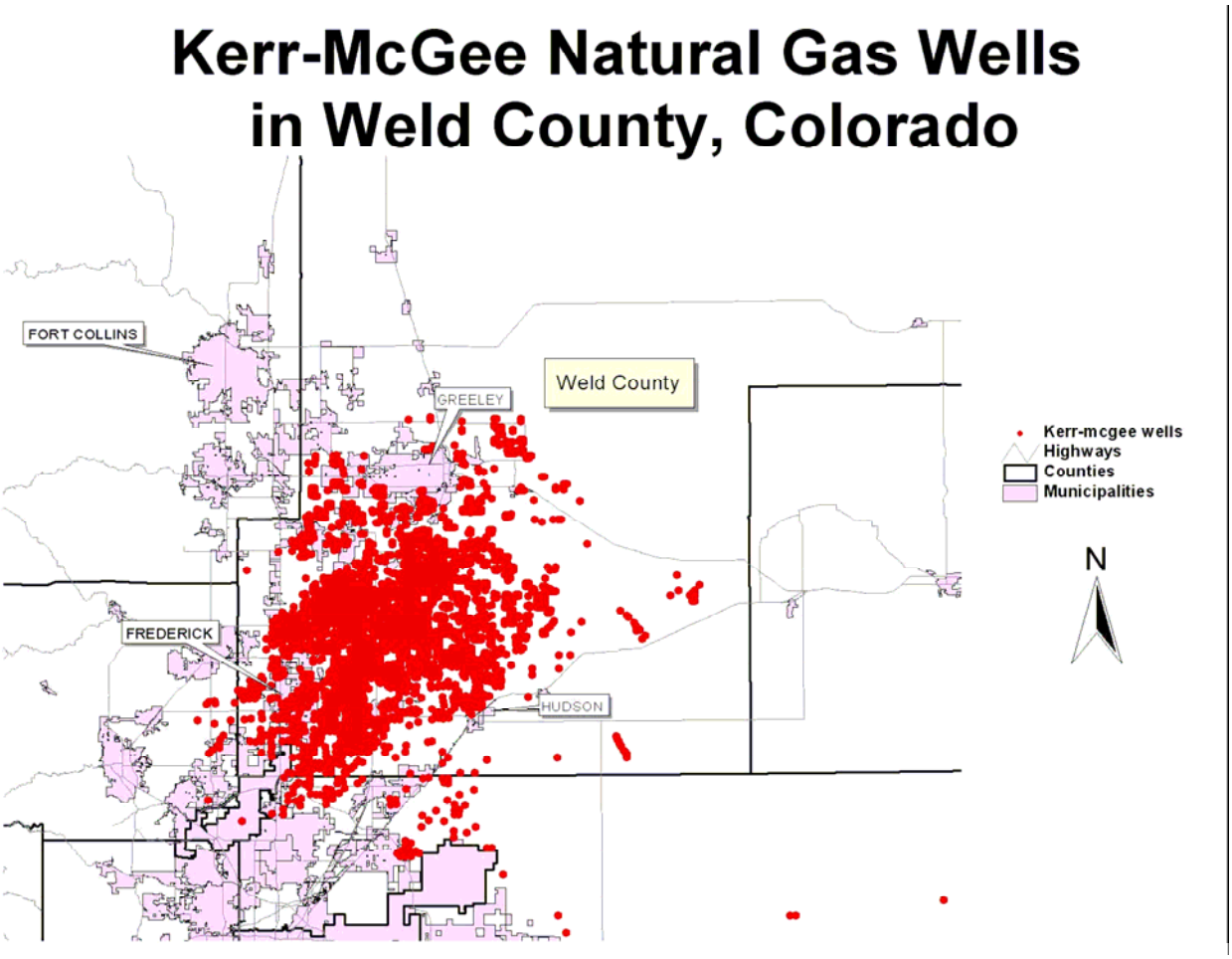
KERR-MCGEE FT LUPTON COMPRESSOR STATION
KERR-MCGEE GATHERING LLC - HUDSON
KERR-MCGEE FREDERICK COMPRESSOR STATION
KERR-MCGEE ROCKY MOUNTAIN CORP. - DOUGAN
KERR-MCGEE ROCKY MOUNTAIN CORP.-BRIGHTON
Platteville
Fort Lupton
Hudson
Brighton
Wattenberg



Data from the Colorado Oil and Gas Conservation Commission, Map Prepared by Rocky Mountain Clean Air Action.

The Colorado Department of Public Health and Environment, Air Pollution Control Division, makes no claim as to its accuracy.